

Bicycle Project Highlights: Off-Road

Wake County Raleigh: Reedy Creek Greenway Trail System TIP Project E-3806A. AA. B

The Reedy Creek Greenway system, located in west Raleigh, North Carolina, is a paved multi-use pathway that provides a connection for bicyclists and pedestrians to two college campuses, the NC Museum of Art, the Green Environmental Education Center, a university research forest, prime open space, and Umstead State Park. A highlight of the greenway is the construction of a unique 660-foot pedestrian bridge over the Interstate 440 Beltline.

The Reedy Creek Greenway system is an asset to the entire community because it gives citizens an alternative transportation opportunity to walk, run, or bicycle on a scenic and safe trail. This greenway system was constructed in phases with the initial phases "A", on the NC Museum of Art grounds, completed in 2000, phase "AA", from Hillsborough Street through Meredith College and a Pedestrian Bridge over I-440 Beltline, completed 2005, and final phase "B", from the Museum of Art to Umstead State Park, that addressed the concerns of environmentalists interested in protecting Schenck Forest and Umstead State Park from the intrusion of high- speed motor vehicle traffic, for this NCDOT has designed improvements to Reedy Creek Road with traffic calming features. This section was completed in 2006.

This greenway system integrates a livable community approach by interconnecting pathways throughout the community with businesses, schools and neighborhoods and by utilizing flexible design approaches and context sensitive solutions. Reedy Creek Greenway receives Environmental Excellence Award.

[Click here](#) for a map of the Reedy Creek Greenway System.

[Click here](#) for a more detailed description of the Reedy Creek Greenway Project.

[Click here](#) for Environmental Excellence Award

[Click here](#) for Sir Walter Raleigh Award



The I-440 Pedestrian Bridge connects two sections of the Reedy Creek Greenway



Reedy Creek Greenway weaves among outdoor sculptures at the North Carolina Museum of Art



Completed project showing concrete pavement along flood-prone section, keystone retaining wall and pavement markings



Approach to 12-ft-wide, 148-ft long, prefabricated steel bridge



Traffic calming techniques for new construction on Reedy Creek Road and adjacent greenway



I-440 Pedstrian Bridge



Greenway through Meredith College



Greenway through Meredith College



Culvert under Wade Avenue



Context sensitive retaining walls

NC Museum of Art, Phase A

The Reedy Creek Greenway system was constructed in phases from Hillsborough Street to Umstead State Park, [click here](#) to view a map of the entire Reedy Creek Greenway project. A 10-ft wide asphalt multi-use trail located on property belonging to the NC Museum of Art was the first section to be completed. This 5000-ft long trail has 2-ft wide crushed stone shoulders to provide a greater functional width for bicyclists and pedestrians to share, as well as to reduce maintenance at the edges of the asphalt surface. Through a private donation the museum was able to commission Thomas Sayre to construct three massive rings in proximity to the trail. In the near future the Museum plans to add additional outdoor sculpture near the trail to enhance visitors' enjoyment of the site.



NC Museum of Art used private funds to add outdoor sculpture to trail (view A)



Outdoor sculpture (view B)



The NC Museum of Art section of the Reedy Creek Greenway provides an important off-road link between university/college campuses, neighborhoods and recreation areas



Marked crosswalks and pedestrian-actuated signals provide an at-grade crossing of a busy road at the western terminus of this project

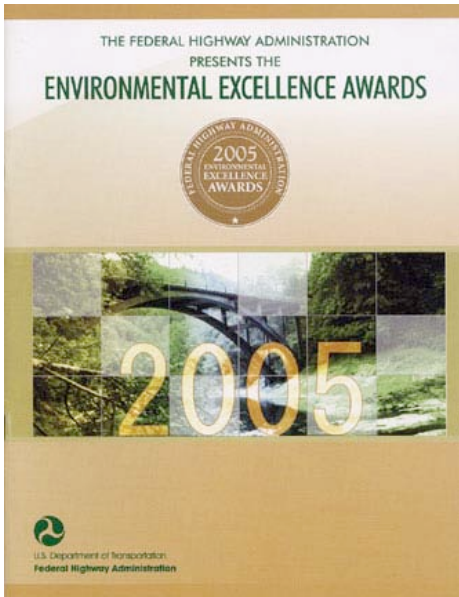


Activities on NC Museum of Art Trail

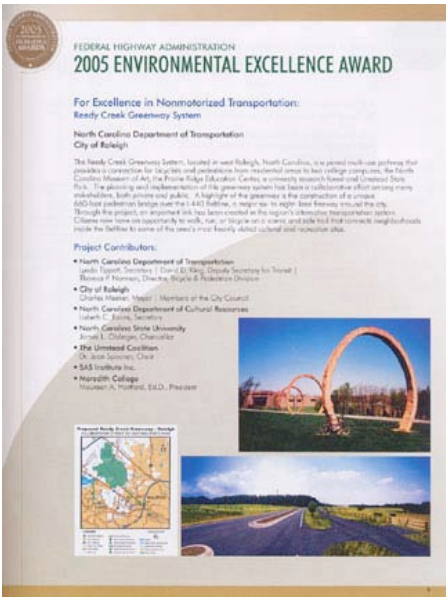
Environmental Excellence Award

The Division of Bicycle and Pedestrian Transportation was pleased to receive the Environmental Excellence Award, for the Reedy Creek Greenway System in Raleigh. The award was presented in Washington, D.C. by the Federal Highway Administration (FHWA) for Excellence in Non-motorized Transportation.

[Click here](#) for the Reedy Creek Greenway System.
[Click here](#) for a map of the Reedy Creek Greenway System.
[Click here](#) for a more detailed description of the Reedy Creek Greenway Project.
[Click here](#) for Sir Walter Raleigh Award



2005 Federal Highway
Adminstration Environmental
Excellence Awards Publication



2005 Federal Highway
Adminstration Environmental Excellence
Awards Publication, project profile



NCDOT Receives 2005 Federal Highway Administration, Environmental Excellence Award. (Left to Right) DBPT, Director, Tom Norman, FHWA Division, Director, John Sullivan, Secretary of Transportation, Lyndo Tippet, Senior Design Engineer, Kumar Trivedi, PE, Structure Design Unit, Project Engineer, Tom Koch, PE, Structure Design Squad Leader. Farzin Asefnia, PE, .

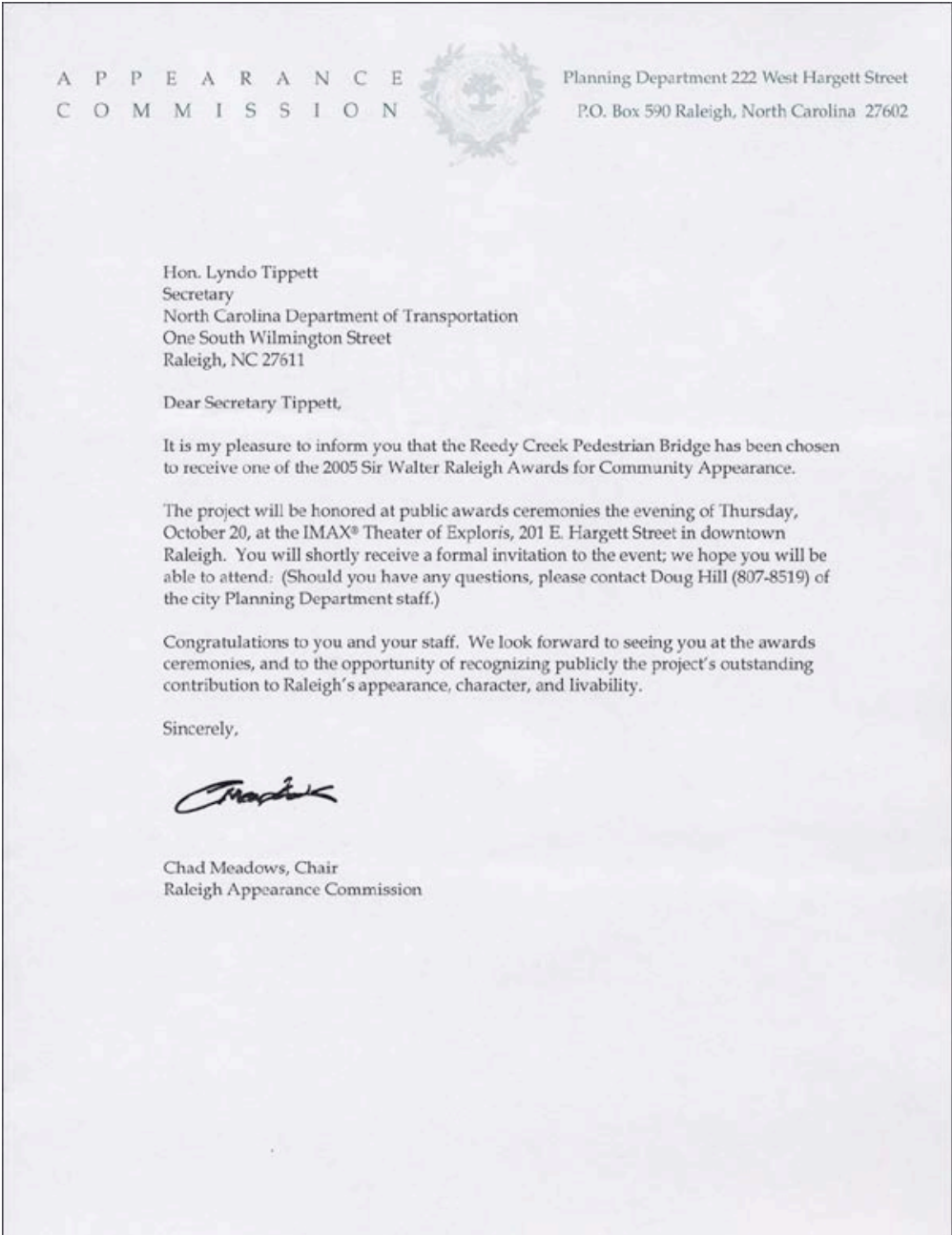
2005 Sir Walter Raleigh Award

The Division of Bicycle and Pedestrian Transportation has received the 2005 Sir Walter Raleigh Award, for Community Appearance, for the Reedy Creek Pedestrian Bridge over I440, in Raleigh.

[Click here](#) for the Reedy Creek Greenway System.
[Click here](#) for a map of the Reedy Creek Greenway System.
[Click here](#) for a more detailed description of the Reedy Creek Greenway Project.
[Click here](#) for Environmental Excellence Award information.



I-440 Pedestrian Bridge



Reedy Creek Greenway Pedestrian Bridge in Raleigh
chosen to receive the Sir Walter Raleigh Award

**Reedy Creek Greenway and Pedestrian Bridge
From Historic Hillsborough Street to Umstead State Park**



The Reedy Creek Greenway system, located in west Raleigh, North Carolina, is a paved multi-use pathway that provides a connection for bicyclists and pedestrians to two college campuses, the NC Museum of Art, the Green Environmental Education Center, a university research forest, prime open space, and Umstead State Park. The planning and implementation of this greenway system has been a collaborative effort among many stakeholders, both private and public. A highlight of the greenway is the construction of a unique 660 foot pedestrian bridge over the Interstate 440 Beltline, a major six to eight lane freeway around the city. In addition, pedestrian underpasses and timber bridges have been constructed to separate the trail from high volume traffic and span wetlands in an environmentally sensitive section of Raleigh. The Reedy Creek Greenway system is an asset to the entire community by giving citizens an alternative transportation opportunity to walk, run, or bicycle on a scenic and safe trail that connects some of the most heavily visited colleges, museums and parks in Wake County.

The Reedy Creek Greenway system was constructed in phases with the initial phases completed in 2001 and 2004. The first section to be completed was a 5000-foot trail that weaves through 150 acres of land belonging to the North Carolina Museum of Art. The 10-foot wide asphalt trail has crushed stone shoulders to provide a greater functional width for bicyclists and pedestrians to share, as well as improve maintenance of the trail. To enhance this section of the trail in a distinctive way the Museum of Art was able to commission artist Thomas Sayre through private donations to design three massive ring-shaped sculptures for placement along side the trail. Furthermore, the Museum plans to add additional pieces of outdoor art to this section of the Greenway as private donations become available. These outdoor sculptures give trail users and Museum visitors a unique experience in which transportation and the visual arts overlap.

One of the most notable elements of the Reedy Creek Greenway system is the construction of a specially designed 660-foot long, 12-foot wide, triple arch bridge with simulated stone foundations. The bridge, a crucial component to the successful implementation of the greenway system, allows pedestrians and bicyclists to safely cross over a high volume urban freeway, and was finished in November 2004. Umstead State Park, which is only a few miles from the new pedestrian bridge, is a 5,439-acre park that has over thirty miles of trails that are delicately woven through preserved forests, lakes and streams. The new bridge gives residential areas, NC State University and Meredith College students safe and valuable access to the NC Museum of Art, the Green Environmental Education Center, Schenck Forest, and Umstead State Park.

The I-440 pedestrian bridge has been designed in a context sensitive manner by involving the stakeholders early and throughout the process and by incorporating simulated stone masonry on the bridge foundations. The simulated stone work, patterned and colored to resemble fieldstone, is actually concrete that has been made to resemble stone with special latex form liners. In addition to the I-440 bridge, a 70-foot laminated wood pedestrian bridge was constructed across House Creek, a tributary of the Neuse River. The Museum of Art has obtained an enhancement grant to hire a local artist to design and construct special artistic features for this stream crossing on the Museum site.

Going west from the NC Museum of Art the Greenway is aligned beside Reedy Creek Road a once unpaved farm to market road that connects to Umstead State Park. Key aspects of the Reedy Creek Greenway System could not have been accomplished without the partnership of stakeholders that manage properties along Reedy Creek Road. The Bicycle and Pedestrian Division of the North Carolina Department of Transportation coordinated throughout the planning and design process with the city of Raleigh, Wake County Government, NC State University (NCSU), the Museum of Art, the Museum of Natural Sciences, US Army National Guard, SAS Institute (SAS), Umstead State Park and a coalition of environmental groups concerned with impacts to Schenck Forest and Umstead State Park.

A notable collaborative effort has been formed with SAS Institute, the world's largest privately held software company and the Umstead Coalition, a group of environmental activists. SAS has its headquarters in close proximity to Umstead State Park and Reedy Creek Road. The SAS complex of offices has 4,000 employees that use the surrounding transportation facilities. The company has constructed a new driveway accessible to Reedy Creek Road and the Greenway. To facilitate access for SAS employees and also to address the concerns of environmentalists interested in protecting Schenck Forest and Umstead State Park from the intrusion of high-speed motor vehicle traffic, NCDOT has designed improvements to Reedy Creek Road with traffic calming features. Construction plans include the Greenway with a landscaped buffer separating it from Reedy Creek Road. Roadway improvements include a pavement with two narrow traffic lanes divided by a concrete median with a simulated field stone pattern that creates a parkway look from the Museum of Art to Umstead State Park.

A major environmental issue surrounding the roadway upgrade concerned possible negative impacts to a woodland research facility owned by NCSU, known as Schenck Forest. This wooded and agricultural research site was threatened by additional development and right-of-way acquisition for road construction. By planning and designing Reedy Creek Road with a minimal footprint, traffic calming features, and incorporating the Reedy Creek Greenway system within the current roadway corridor, no land or trees will be removed from Schenck Forest. The neighboring landowners, including SAS, NCSU and Umstead State Park.

The Reedy Creek Greenway system promotes community cohesion by incorporating unique enhancement measures with continuous public involvement and partnership efforts. This greenway system integrates a livable community approach by interconnecting pathways throughout the community with businesses, schools and neighborhoods and by utilizing flexible design approaches and context sensitive solutions. The Reedy Creek Greenway and Pedestrian Bridge is continues to be an asset to the entire community by accommodating the multi-modal needs of its citizens through the development and coordination of a project that fully embraces environmental excellence.

The map below shows the completed Reedy Creek Greenway Trail project. This off-road bicycle improvement spans from inside the I-440 beltline to a junction with a trail system at Umstead State Park. This facility connects NCSU, Meredith College, the NC Museum of Art, the Loblolly Trail through Schenk Forest, Richland Lake and Umstead State Park.

REEDY CREEK GREENWAY TRAIL

